

REMARKS

Applicants hereby acknowledge the Examiner Interview between the Examiner, Tuan T. Dinh, and Attorney for Applicants, Serge J. Hodgson, on January 7, 2004 and January 14, 2004. Co-filed herewith is a completed Applicant Initiated Interview Request Form PTOL-413A, which was faxed to the Examiner on January 7, 2004, prior to the Examiner interview, and completed by the Attorney for Applicants following the Examiner Interview.

During the interview, the Examiner acknowledged that the Examiner had authority to enter into agreements with the Applicants during the Examiner interview.

For the reasons set forth in this Amendment, the Examiner agreed that the objection to the drawings would be withdrawn. However, agreement was not reached as to whether Claim 38 reads on the elected Specie I (figures 1-2).

Further, for the reasons set forth in this Amendment, the Examiner agreed that the 35 U.S.C. 112, first paragraph rejection of Claim 38 and the 35 U.S.C. 112, second paragraph rejection of Claim 37 would be withdrawn.

Agreement was not reached as to whether Claims 1-4, 9-12, 14-16, 25, 33 are novel over Pollack. However, for the reasons set forth in this Amendment, the Examiner agreed that Claims 36 and 37, as clarified by the amendment herein, are allowable over Pollack. Agreement was not reached as to whether Claim 5 is patentable over Pollack in view of Wyland et al.

Finally, the Examiner agreed that Claims 13 and 17 as amended herein are allowable. The Examiner indicated that the Examiner would issue a separate summary of the Examiner Interview.

In this Amendment, to expedite prosecution, Claims 1, 19-26 and 34-35 have been canceled without prejudice.

Claims 13 and 17 have been amended to be in independent form and to include the features of the base claim and any intervening claims.

Claims 2-4, 9-12, and 14 have been amended to depend from Claim 13.

Claims 36-37 have been amended as agreed to by the Examiner as discussed above. Claims 36-37 have been amended for purposes of clarity and thus for reasons unrelated to patentability.

The headings below are numbered to correspond with the heading numbering used by the Examiner in the Office Action.

1) Objection to the Drawings.

The Examiner states:

... The drawings must show every feature of the invention specified in the claims. Therefore, the "said drain base surface is below or parallel and coplanar with said pocket base surface, claims 34-35", and "said sealing encapsulant ... region, claim 38" must be shown or the feature(s) canceled from the claim(s). (Office Action, page 2, emphasis in original.)

To expedite prosecution, Claims 34-35 have been canceled thus obviating the first objection to the drawings ("said drain base surface is below or parallel and coplanar with said pocket base surface, claims 34-35").

The second objection to the drawings ("said sealing encapsulant ... region, claim 38") is respectfully traversed.

Claim 38 recites:

The package of Claim 36 wherein said sealing encapsulant comprises an exterior surface, **said exterior surface comprising a planar central region and a non-planar peripheral region.** (Emphasis added.)

Further, Applicants' specification sets forth:

However, in an alternative embodiment, instead of exterior surface 142 being an entirely planar surface,

exterior surface 142 has a planar central region CR and a non-planar peripheral region PR (indicated by the dashed lines). More particularly, planar central region CR of exterior surface 142 is parallel and coplanar with mating surface 102U. Non-planar peripheral region PR is around the entire periphery of planar central region CR and slopes downwards from planar central region CR. (page 9, lines 10-18, emphasis added.)

Further, the planar central region CR and the non-planar peripheral region PR are clearly shown and labeled in FIG. 2. Accordingly, as agreed to by the Examiner, the drawings satisfy 37 CFR 1.83(a).

For similar reasons, Claim 38 reads on the elected Species I (figures 1-2).

For the above reasons, Applicants respectfully request reconsideration and withdrawal of the objection to the drawings.

2/3) Claim 38 satisfies 35 U.S.C. 112, first paragraph.

To expedite prosecution, Claims 34-35 have been canceled thus obviating the rejection of Claims 34-35.

With regards to Claim 38, the Examiner states:

The specification is silent regarding ... "said sealing encapsulant ... region, claim 38" ... (Office Action, page 3.)

The Examiner's statement is respectfully traversed. As discussed above, Claim 38 recites:

The package of Claim 36 wherein said sealing encapsulant comprises an exterior surface, **said exterior surface comprising a planar central region and a non-planar peripheral region.** (Emphasis added.)

Further, Applicants' specification sets forth:

However, in an alternative embodiment, instead of exterior surface 142 being an entirely planar surface, **exterior surface 142 has a planar central region CR and a non-planar peripheral region PR (indicated by the dashed lines).** More particularly, planar central region CR of exterior surface 142 is parallel and

coplanar with mating surface 102U. Non-planar peripheral region PR is around the entire periphery of planar central region CR and slopes downwards from planar central region CR. (page 9, lines 10-18, emphasis added.)

Further, the planar central region CR and the non-planar peripheral region PR are clearly shown and labeled in FIG. 2. Accordingly, the subject matter of Claim 38 was described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Thus, as agreed to by the Examiner, Claim 38 complies with the written description requirement of 35 U.S.C. 112, first paragraph.

For the above reasons, Applicants respectfully request reconsideration and withdrawal of this rejection.

4/5) Claim 37 satisfies 35 U.S.C, 112, second paragraph.

The Examiner states:

Claim 37, lines 1-3, it is confuse. The phrase of "said sealing encapsulant comprises an entirely planar exterior surface extending over said runner surface" is not understood. (Office Action, page 3.)

The Examiner's statement is respectfully traversed. As shown in at least FIG. 2, Applicants' specification sets forth:

Sealing encapsulant 140 and exterior surface 142 extend horizontally over runner surface 130. Accordingly, **exterior surface 142 is a single planar surface, which extends horizontally over pocket 104 and runner surface 130.**

However, in an alternative embodiment, **instead of exterior surface 142 being an entirely planar surface,** ... (Page 9, lines 5-11, emphasis added.)

Accordingly, Applicants respectfully submit that one of skill in the art would understand what is being claimed in amended Claim 37 when read in light of the specification.

Thus, as agreed to by the Examiner, amended Claim 37 satisfies 35 U.S.C. 112, second paragraph.

For the above reasons, Applicants respectfully request reconsideration and withdrawal of this rejection.

6/7) Claims 2-4, 9-12, 14-16, 33 and 36-38 are novel over Pollack.

To clarify the record, Applicants note that the heading at page 4 of the Office Action recites that Claims 1-4, 9-12, 14-16, and 25 are rejected as being anticipated by Pollack. However, following this heading and at pages 6-8 of the Office Action, Claims 33-35, 36-38 are rejected based on Pollack. Thus, Claims 33-38 should also have been listed as being rejected as being anticipated by Pollack in the heading at page 4 of the Office Action.

To expedite prosecution, Claims 1, 25, 34-35 have been canceled thus obviating the rejection of Claims 1, 25, 34-35.

As set forth below in section 10 under Allowable Subject Matter, Claim 13 is allowable. Claims 2-4, 9-12, 14-16, and 33, which depend from Claim 13, are allowable for at least the same reasons as Claim 13.

Regarding Claim 36, the Examiner states:

As to Claim 36, ... Pollack discloses ... a sealing encapsulant filling said pocket (column 7, lines 35-37), **said sealing encapsulant extending over said runner surface (note: when the sealing encapsulant filled into the chamber/pocket 114 too full then the encapsulant extends over the runner surface and fill into the chamber/reservoir 112);** said sealing encapsulant comprises an exterior planar surface extending in the horizontal direction over said runner surface; and excess encapsulant within said overflow reservoir (see figures 1-3). (Office Action, pages 7-8, emphasis added.)

The Examiner's statement is respectfully traversed. In contrast to the Examiner's assertion that "when the sealing encapsulant filled into the chamber/pocket 114 too full then

the encapsulant extends over the runner surface", Pollack teaches:

As shown in FIG. 7B, in a first step of encapsulating the electronic components disposed within the encapsulation package 704, the inner chamber 714 is at least partially filled with a quantity of potting compound (encapsulation material) 715 which is sufficient to completely cover portions of the leadframe fingers (730b and 730f) within the inner chamber 714, the printed circuit board 720, the wires 726 and, optionally, the component 728, **but not so much that the potting compound 715 "spills" over the inner wall 710** separating the inner chamber 714 from the outer chamber 712. (Col. 20, lines 22-33, emphasis added.)

Accordingly, Pollack teaches away from over filling the "chamber/pocket 114" and thus teaches away from "the encapsulant extends over the runner surface" as asserted by the Examiner.

For at least the above reasons, Pollack does not teach or suggest a package comprising:

a substrate comprising:
a pocket;
an overflow reservoir around a periphery of said pocket;
a runner surface extending between said pocket and said overflow reservoir; and
a mating surface around a periphery of said overflow reservoir;
a first electronic component coupled within said pocket;
a sealing encapsulant filling said pocket, said sealing encapsulant extending over and above said runner surface; and
excess encapsulant within said overflow reservoir,

as recited in amended Claim 36, emphasis added.

Accordingly, as agreed to by the Examiner, Claim 36 is allowable over Pollack. Further, Claims 37-38, which depend from Claim 36, are allowable for at least the same reasons as Claim 36.

For the above reasons, Applicants respectfully request reconsideration and withdrawal of this rejection.

8-9) Claim 5 is patentable over Pollack in view of Wyland et al.

As set forth below in section 10 under Allowable Subject Matter, Claim 13 is allowable. Claim 5, which depends from Claim 13, is allowable for at least the same reasons as Claim 13.

For the above reasons, Applicants respectfully request reconsideration and withdrawal of this rejection.

10) Allowable subject matter.

The Examiner states:

Claims 13, 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. (Office Action, page 9.)

Claims 13, 17 have been rewritten in independent form including all of the features of the base claim and any intervening claims. Accordingly, Claims 13, 17 are allowable.

Withdrawn Claims 6-8, which depend from generic Claim 13, should be reinstated. As stated by the Examiner at page 3 of the Office Action dated March 7, 2003:

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141.

Further, Claims 6-8, which depend from Claim 13, are allowable for at least the same reasons as Claim 13. Accordingly, Applicants respectfully request reinstatement and allowance of Claims 6-8.

For the above reasons, Applicants respectfully request reconsideration and withdrawal of this objection.

12) As to 37 C.F.R. § 1.116.

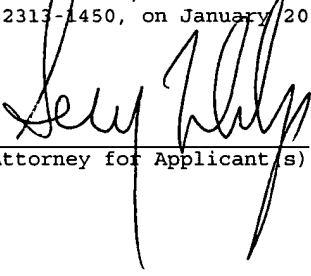
All claim amendments herein are directed to matters of form and place the application in a condition for allowance. Accordingly, this amendment is entitled to entry under 37 C.F.R. § 1.116.

Conclusion

Claims 2-17, 33, 36-38 are pending in the application. For the foregoing reasons, Applicants respectfully request allowance of all pending claims. If the Examiner has any questions relating to the above, the Examiner is respectfully requested to telephone the undersigned Attorney for Applicant(s).

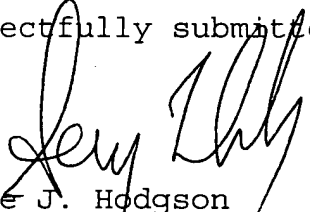
CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on January 20, 2004.


Attorney for Applicant(s)

January 20, 2004
Date of Signature

Respectfully submitted,


Serge J. Hodgson
Attorney for Applicant(s)
Reg. No. 40,017
Tel.: (831) 655-0880